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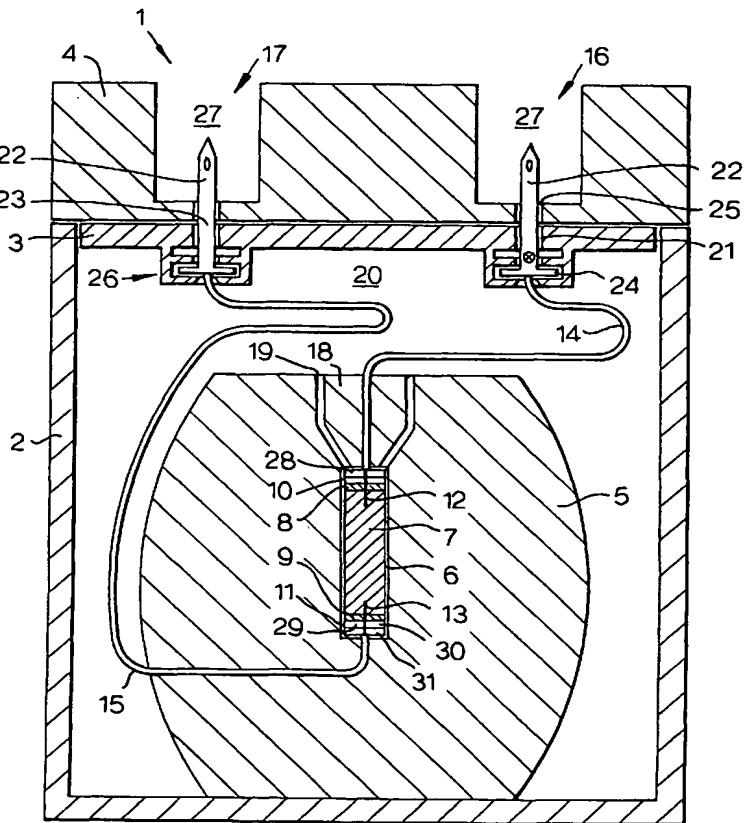
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(54) Title: RADIOISOTOPE GENERATOR AND METHOD OF CONSTRUCTION THEREOF



(57) Abstract: A device for producing a fluid containing a radioactive constituent, comprising a shielded chamber (5) with an opening for receiving an isotope container (6) housing a radioactive isotope (7); a chamber closure (18) adapted for cooperating with and closing the chamber opening; a first fluid port comprising a first hollow needle projecting into the shielded chamber from the chamber closure for fluid communication with the isotope container; a second fluid port comprising a second hollow needle projecting into the shielded chamber from the closed end of the chamber opposite the chamber closure for fluid communication with the isotope container; first and second compressible buffers (28, 29) mounted so as to surround at least partially the respective first and second hollow needles (12, 13), each buffer providing an outer surface for contact with opposed ends of the isotope container; and a spacer of a predetermined thickness associated with one or each of the first and second compressible buffers for determining the positioning of the isotope container within the shielded chamber.

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

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## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 3 655 981 A (MONTGOMERY JAMES R ET AL) 11 April 1972 (1972-04-11) column 2, line 48 -column 6, line 61; figures 1-6	1,6-9, 14-17
A	FR 2 194 021 A (HOECHST AG) 22 February 1974 (1974-02-22) page 3, line 36 -page 6, line 1; figure 2	1,2,6,8, 9,11-14
A	US 3 535 085 A (SHUMATE DONALD J) 20 October 1970 (1970-10-20) the whole document	1,2,6,8, 14
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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